

tape or the so-called "Scotch tape." The steps of laying the mortar on the next adjacent area, placing the sheet of film over it, compacting the film-covered area, and removing the film, are repeated until the entire surface to be coated with an overlay of the mortar has been thus treated.

An additional advantage of this method consists in that an applicator selecting film materials, chemically unreactive, at ambient temperatures with the resinous component of the mortar, need not remove the film immediately after compacting and may leave it on the surface of the mortar until this latter is completely cured (set). This is particularly true of polyester resin-aggregate mortars, when films of materials unreactive at ambient temperatures with such polyester resins, for instance, films of polyethylene, polypropylene, silicone-treated paper, wax-treated paper, and the like, are employed to cover the mortar surface to be compacted. Leaving the film on the surface after compaction and until the cure is completed prevents evaporation of the cross-linking agent (styrene), protects the mortar surface from adverse action of air-oxygen and moisture, which may interfere with polymerization, and thus assures satisfactory set of the overlay. Also, this technique protects the mortar surface while being cured from deleterious effects of nightly precipitation and rain damage until the surface is ready to be opened to traffic.

Various mechanical means which would automatically place (feed) the film on the mortar surface in front of the roller, and then would remove it when the roller has passed, can be employed in accordance with the principle of the invention. The device for the automatic placement of the film before the roller may be combined with a device for pouring and spreading the mortar on the paved undersurface, both devices being located on a suitably propelled platform. After having been picked up by a rewind device, the film is wound up on a storage roll or spool and can be discarded.

A schematic representation of such an embodiment is shown in the accompanying drawing. In this drawing, numeral 1 designates a platform mounted on wheels with tires 2 and propelled by a drive mechanism 3, such as a diesel engine.

The resin-forming components and the aggregate are combined into a mortar in a mixer 4. From this mixer, mortar 5 drops into a feed hopper 6 and is conveyed, for instance, by means of a belt conveyor 7 to a screw auger 8. This auger serves to pour mortar 5 on the surface of the pavement. As the platform moves in the direction AB shown by the arrow, mortar 5 is spread by means of a spring-loaded levelling shoe 9. A film 10, such as a polyethylene film, is fed from feed roller 11 against shoe 9 and under compaction roller 12 to storage roll 13. As the machinery progresses along the road, the mortar is compacted by a weighted compaction roller 12. The polyethylene film is wound up on a storage or waste roll 13 rotated by a motor 14 which may be actuated from the drive mechanism of the platform.

In place of the feed roll 11 or the pick-up (storage) roll 13 shown in the drawing, one may use a combination of two rolls with a continuous length of interlayer film; for instance, a length of a tear-and-wear resistant polyethylene, polypropylene, rubber, or the like. This film would pass over a driving roller and under the compacting roller having a speed of the two rolls so synchronized as to eliminate the risk of the film belt slipping off. This continuous film belt will be so chosen as to withstand wear in the course of compaction of the mortar for a maximum length of time, without becoming torn or neces-

sitating too frequent replacements. In this embodiment, a blade may be provided immediately after the compacting roller to scrape off any mortar which may adhere to the belt, assuring thereby continuous unimpeded operation.

It is to be understood that various modifications of the invention described in the foregoing specification will occur to those skilled in the art reading the same. All such modifications are intended to be included as may be reasonably covered in the following claims.

I claim:

1. Method of compacting an organic resinous mortar on a paved undersurface to provide a roughened texture overlay thereon, said method comprising:

- (1) spreading the mortar on the paved undersurface;
- (2) placing on the surface of spread mortar a flexible sheet of a film material, peelable from said mortar surface;
- (3) applying a compacting force to such sheet of flexible film material and the area adjoining it to compact the underlying mortar surface;
- (4) withdrawing this force; and
- (5) peeling said sheet of flexible film material from the surface of the mortar upon withdrawal of the compacting force.

2. A method as defined in claim 1, wherein said sheet of flexible film material is from about 1 to about 10 mils thick.

3. A method as defined in claim 1, wherein said sheet of flexible film material is a sheet of polyethylene film.

4. A method as defined in claim 1 wherein said sheet of flexible film material is a sheet of polypropylene film.

5. A method as defined in claim 1, wherein said sheet of flexible film material is a sheet of polyethylene from about 1 to about 10 mils thick.

6. A method as defined in claim 1, wherein the flexible sheet of a film material is peeled immediately from the mortar surface upon withdrawal of the compacting force.

7. A method of compacting a polyester resin mortar on a paved undersurface to provide a roughened texture overlay thereon, said method comprising:

- (1) spreading the mortar on the paved undersurface;
- (2) placing on the surface of spread mortar a flexible sheet of a film material chemically unreactive with said polyester resin at ambient temperatures and peelable from said mortar surface;
- (3) applying a compacting force to said flexible sheet of film material and the area beneath it to compact the underlying surface;
- (4) withdrawing this force;
- (5) keeping said flexible sheet of film material on the surface of the mortar until the surface is cured; and
- (6) peeling said sheet of film material from the surface of the mortar.

8. A method as defined in claim 1, wherein said sheet of flexible film material is a sheet of polyolefin film.

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